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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,278	09/09/2003	Jun-Hyuk Lee	P56854	1391

7590   10/05/2007

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EXAMINER
LAM, DUNG LE

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
10/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,2,4,5 and 8* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1,2,4,5 and 8* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/03/06 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The last two paragraphs of claim 1 recites,

"a first hub for relaying data between the base station, the base station controller, the private packet data service node and the private authentication system, when including a specific server address in a Unicast Access Terminal Identifier (UATI) assigned to a terminal, requesting a call connection or a destination address related to a part of a receiver, and transmitting a connection request signal of the terminal to the base station controller in response to the address information being the same, the first hub having a specific server address; and"

a second hub connected to a public base station, a public base station controller, the data location register and a public network packet data service node while being connected to the first hub, the second hub receiving the connection request signal of the terminal to be

transmitted when said specific server address is not included, and transmitting the signal to the public network base station controller".

The claim recites, "the address information **being the same**". The limitation does not recite what piece of information/data is being compared with the address information. In other word, "the address information is being the same" as what?

The examiner notes that claim 1 is a system claim, however it is written as if it is a method claim containing steps "relaying ... including..." or "transmitting". The examiner suggests changing the steps to "A first hub is configured to relay .... when a specific server address is included in a call connection request" or "is configured to transmit" to clarify claim.

It is not clear what is the significance of the limitation of "requesting ... a destination address related to a part of a receiver". It is also not clear how it is connected to the rest of the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims **1, 2, 4 and 5** rejected under 35 U.S.C. 103(a) as being unpatentable over **McIntosh** (US Patent Number 2003/0139180) in view of **Lu** (US Patent No. 6212395) in view of **Stevens** (TCP/IP Illustrated Volume, p. 37-41).

2.   Regarding **claim 1**, **McIntosh** teaches in Figures 1 and 2 a base station (168) for

assigning a n ID which reads on UATI to each terminal of the public and private wireless

networks to provide services of the high-speed wireless data system:

a base station controller (162) for performing different authentications for the

terminals according to the public wireless network and the private wireless network to

one of which each of the terminals belongs, assignment of an UATI to each of the

terminals, management of a session for each of the terminals, and control of data

transmitted to or received by each of the terminals;

a private authentication system (radius server 212) including an authentication

database for authenticating the terminal of the private wireless network (120, [0038,

0067, 0068, 0077, 0092]); a data location register (144 and 156) having service

information of the public wireless network terminal and information for receiving services

from the private wireless network of the private wireless network terminal; and a hub for

intermediating data between the base station ([0052, 0055, 0060, 0065, 0067, 0068,

0073]).

the base station controller (162), and the private authentication system (212), a

private packet data service node for providing private wireless data services to the

terminal of the private wireless network a first hub for intermediating data between the

base station the base station controller.

a private packet data service node for providing private wireless data services to

the terminal of the private wireless network (128 of Fig. 2);

a first hub (NIB 124) for relaying data between the base station, the base station

controller, the private packet data service node and the private authentication system;

and a second hub connected to a public base station a public base station controller the

data location register and a public network packet data service node ([0052, 0055,

0060, 0065-0069, 0073, 0077], Fig. 4 and 5);   However, McIntosh does not explicitly

teach the details of the first hub requesting a call and transmitting a connection request

in response to an address being the same and that the second hub receives the

connection request signal and transmit the signal to the network base station controller.

In an analogous art, Lu teaches the routing of a call between a private network and a

public network (Fig 6A or 7). When the address of the terminating terminal belongs to

the same private network, then the GSM PBX requests and transmits the call to

components of the current private GSM PBX network (C15 L40- C16 L5). However, if

the destination address of the call is not the same as that belongs to the private

network, then a call is being request and transmitted to the second hub or the public

MSC to be connected in the public network (C16 L6-49). Therefore, it would have been

obvious for one of ordinary in the art at the time of the invention to combine McIntosh's

data communication system and Lu's method of distinguishing a call to the public or

private network based on the address to facilitate the call routing function.

Furthermore the above limitation is similar to the known concept of IP routing

where the first/current hub determines whether the destination address has an address

information derived from the terminal matches with the servers/hosts that is connected

to the first hub. If it does then a connection request is sent directly to the host.

Otherwise, the connection is routed to the second hub, which routes the connection to other components/BSC of the public network. In an analogous art, **Stevens** teaches that when a datagram is sent, if the destination is directly connected to the host or on a shared network then it is sent directly to the destination otherwise the host sends the datagram to a default router and let the router deliver the datagram to its destination (Page. 38-41). Therefore, it would have been obvious for one of ordinary in the art at the time of the invention to combine McIntosh's private and public communication system and Stevens's known in the art IP routing concept of routing a connection directly to the internal network if it has a matching address and send the connection to another hub if the address doesn't match to facilitate the routing process.

3.   Regarding **claim 2**, **McIntosh, Lu and Stevens** teach a system according to claim 1, wherein McIntosh further teaches the base station and the base station controller assign an IP address for performing an IP telecommunication, and process data and signaling for the assigned address (**McIntosh** [0052, 0055, 0060, 0065, 0067, 0068, 0073]).

4.   Regarding **claim 4**, **McIntosh, Lu and Stevens** teach a system according to claim 1, wherein McIntosh further teaches, in a case where the terminal of the private wireless network is also used in the public wireless network, the data location register stores terminal information of both the private wireless network and the public wireless network in the terminal and assigns the UATI of the private wireless network to the

terminal when the terminal is located within a range of a predetermined base station (**McIntosh** [0062, 0063, 0067, 0068, 0069, 0071]).

5.   Regarding **claim 5**, **McIntosh, Lu and Stevens** teach a system according to claim 1, wherein McIntosh further teaches that the data location register assigns the UATI of the private network to a corresponding terminal, when the terminal is located within a predetermined base station in a predetermined time zone (**McIntosh** [0062, 0064]).

6.   Regarding **claim 8**, **McIntosh, Lu and Stevens** teach a system according to claim 1, wherein McIntosh further teaches that the private authentication system further has a database for authentication of the terminal of the public wireless network (**McIntosh** [0061]).

Response to Arguments

Applicant's arguments with respect to claims 1,2,4,5 and 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Lam whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL

LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER